2006 Monitoring Well Sampling and Analysis Event

North Wind, Inc.

Deseret Chemical Depot
Restoration Advisory Board
Meeting
March 14, 2007

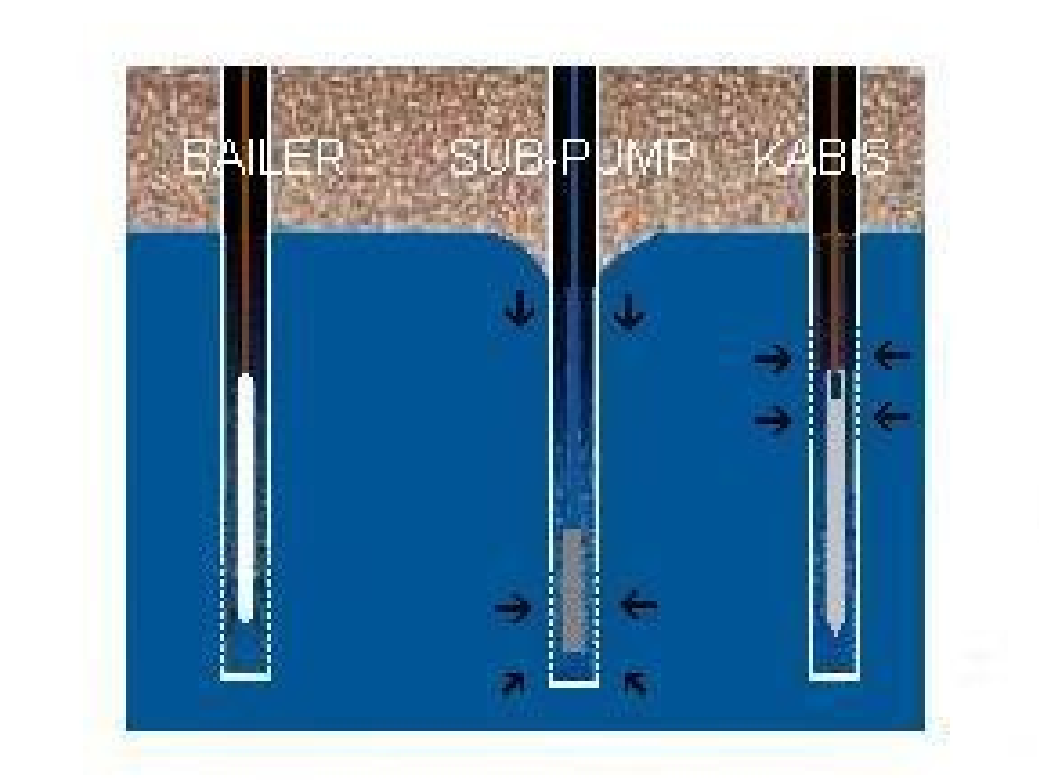
Presentation Overview

- Description of the 2006 Sampling Approach (using Kabis sampler and techniques)
- Summary of Sampling Program and Results

Advantages of a Low-Flow Sampling Approach

- Draws in groundwater from immediate surrounding formation
- Does not create vertical flow gradient
- Provides depth discrete sample
- Does not disturb groundwater environment

Kabis Sampling Approach Compared to Traditional Methods



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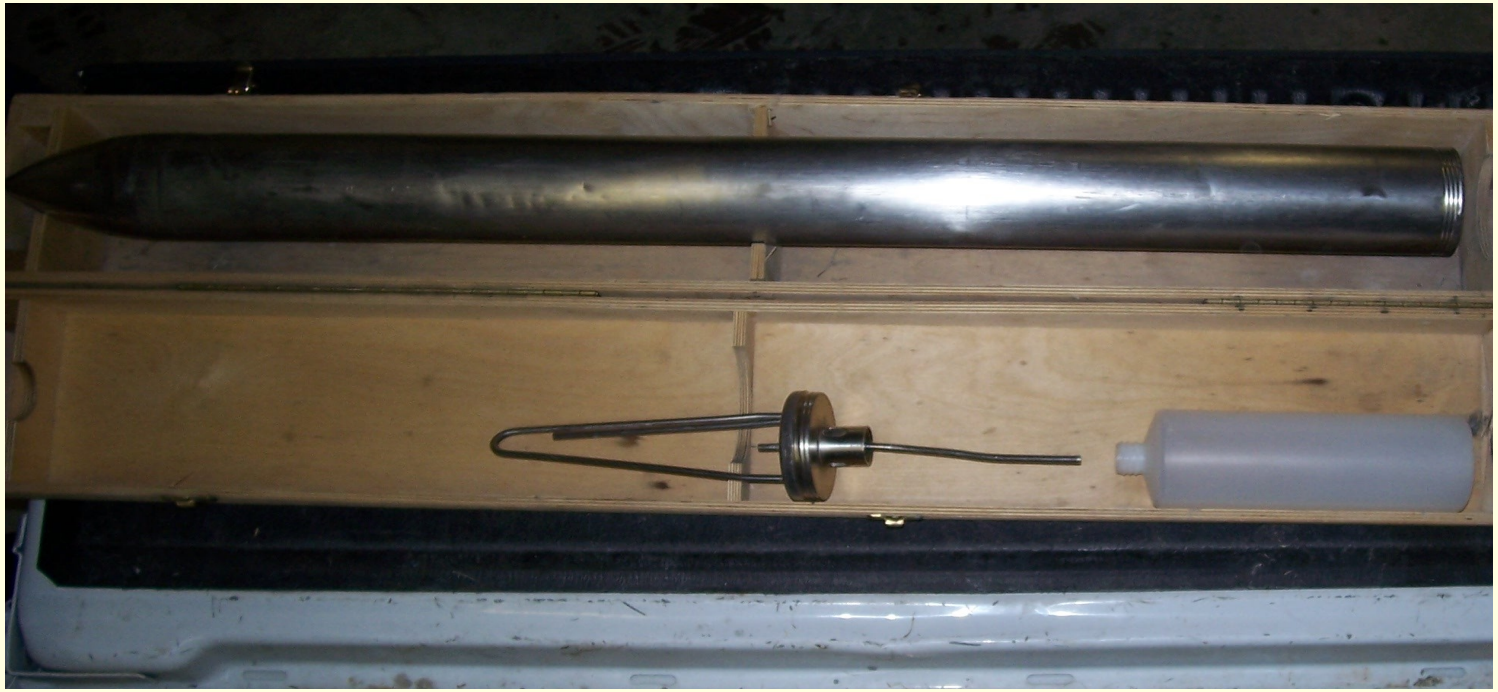
Kabis Sampler



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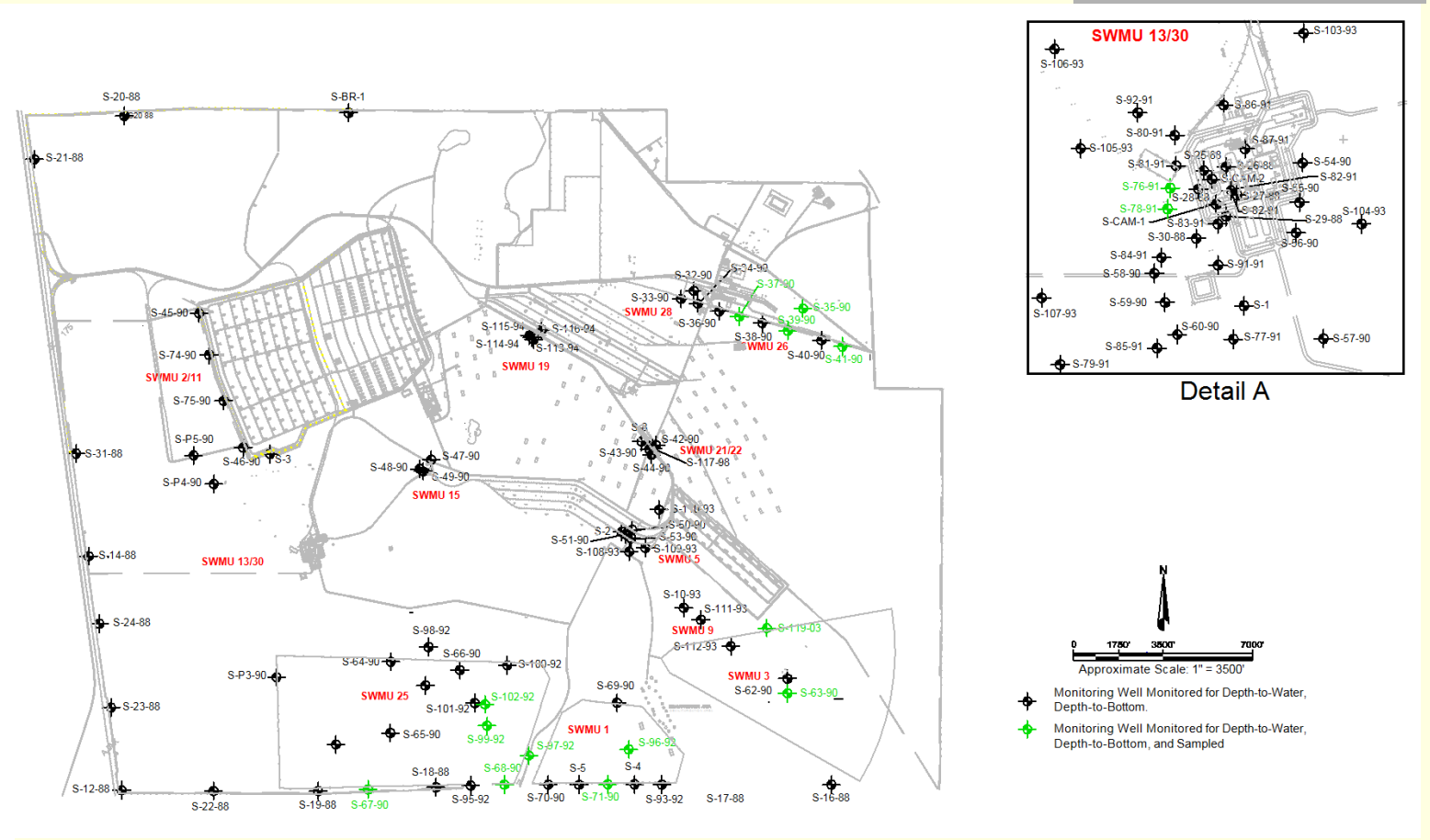
Benefits of Using the Kabis Sampler

- Minimal investigation derived waste (i.e. purge water, etc.)
- Small and easily handled
- No moving parts
- No electrical or air supply necessary
- Efficient sampling with a recovery set-up
- Easily decontaminated
- Obtains depth discrete sample
- Causes no vertical mixing

2006 Groundwater Sampling Program

- Measure groundwater depths and total well depths in 113 wells
- Sample groundwater in 15 wells at six SWMUs
- Present findings at 2007 RAB meeting
- Prepare groundwater monitoring report

DCD Groundwater Monitoring Wells and SWMUs



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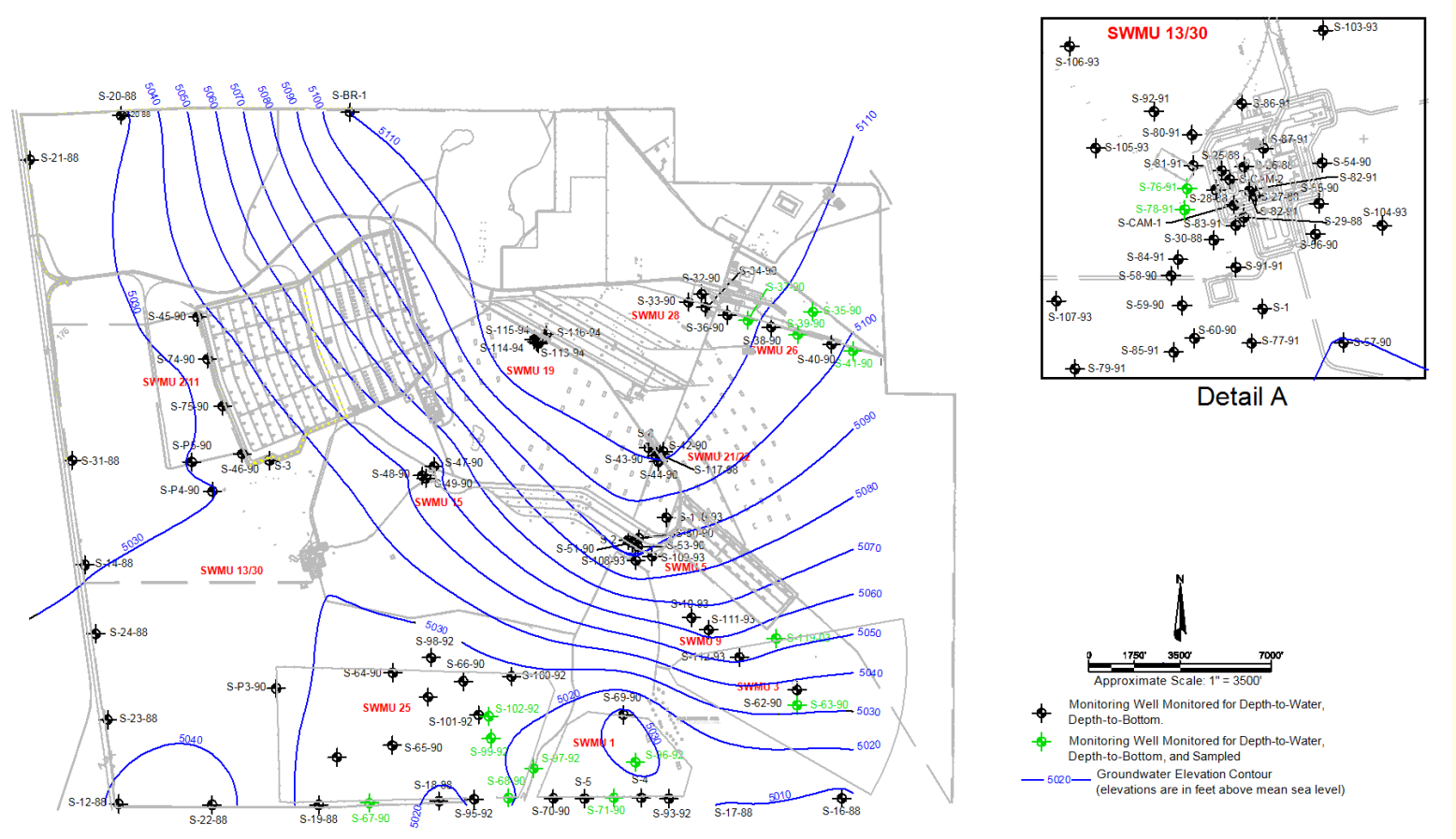
2006 Groundwater Elevation Contours



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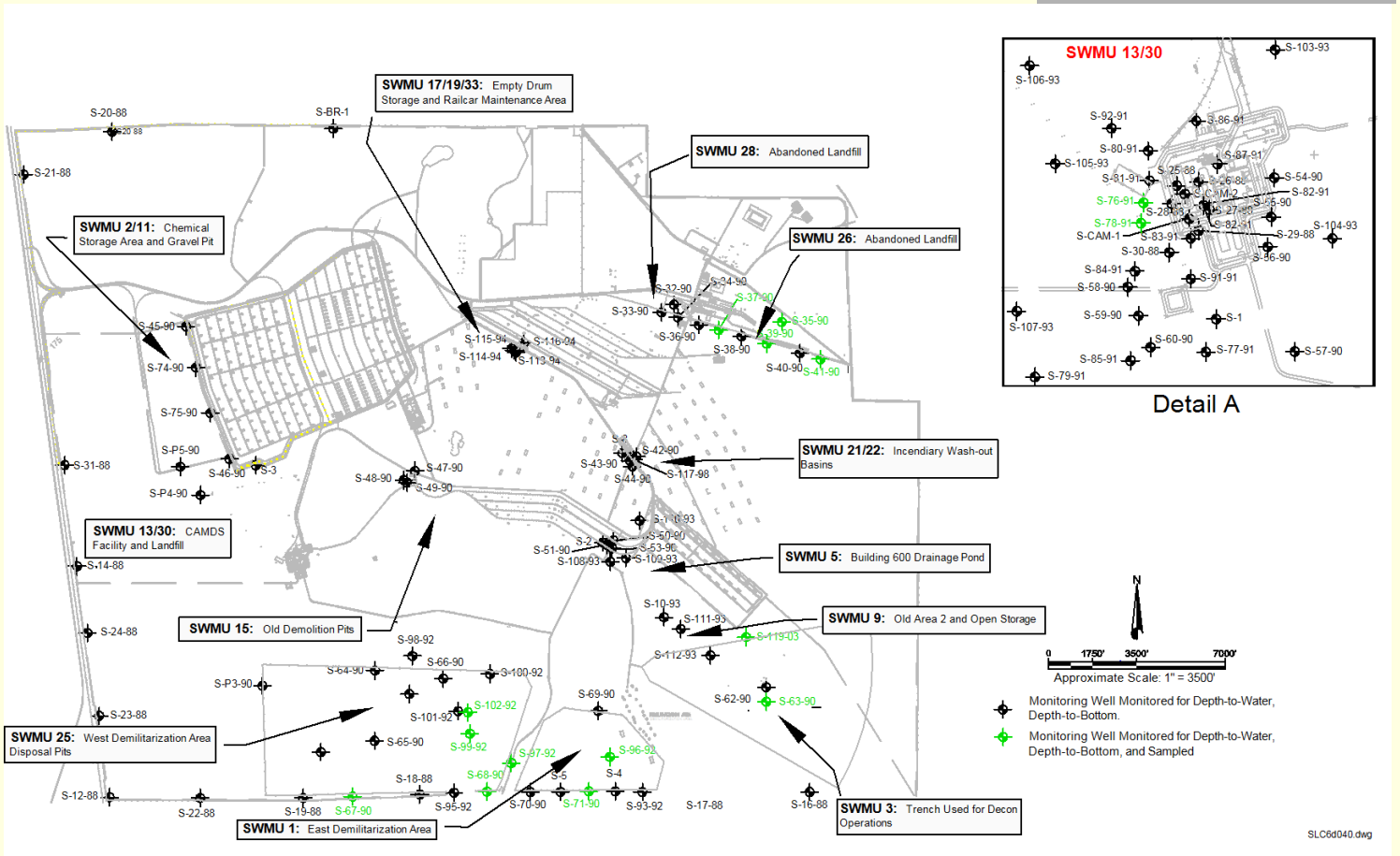
Historical Use of SWMU Areas


SWMU 17/19/33: Empty Drum Storage and Railcar Maintenance Area
SWMU 28: Abandoned Landfill
SWMU 2/11: Chemical Storage Area and Gravel Pit
SWMU 26: Abandoned Landfill
SWMU 21/22: Incendiary Wash-out Basins
SWMU 13/30: CAMDS Facility and Landfill
SWMU 5: Building 600 Drainage Pond
SWMU 15: Old Demolition Pits
SWMU 9: Old Area 2 and Open Storage
SWMU 25: West Demilitarization Area Disposal Pits
SWMU 3: Trench Used for Decon Operations
SWMU 1: East Demilitarization Area
SWMU 13/30
Detail A
Approximate Scale: 1" = 3500'
Monitoring Well Monitored for Depth-to-Water, Depth-to-Bottom.
Monitoring Well Monitored for Depth-to-Water, Depth-to-Bottom, and Sampled
SLC6d040.dwg

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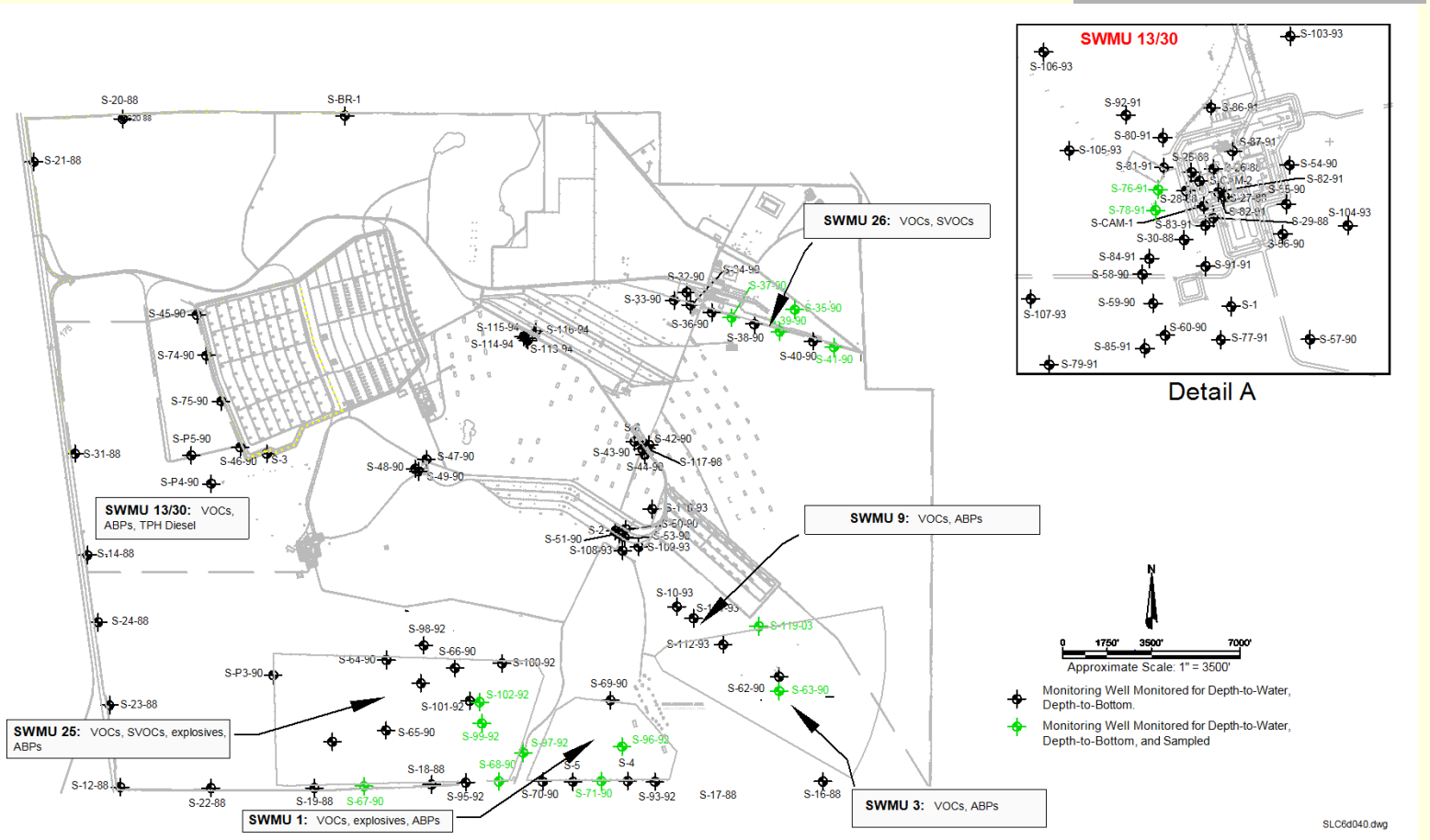
2006 Analytical List


SWMU 26: VOCs, SVOCs
SWMU 13/30: VOCs, ABPs, TPH Diesel
SWMU 9: VOCs, ABPs
SWMU 25: VOCs, SVOCs, explosives, ABPs
SWMU 1: VOCs, explosives, ABPs
SWMU 3: VOCs, ABPs
SWMU 13/30
Detail A
N
0 1750' 3500' 7000'
Approximate Scale: 1" = 3500'
Monitoring Well Monitored for Depth-to-Water, Depth-to-Bottom.
Monitoring Well Monitored for Depth-to-Water, Depth-to-Bottom, and Sampled
SLC6d040.dwg

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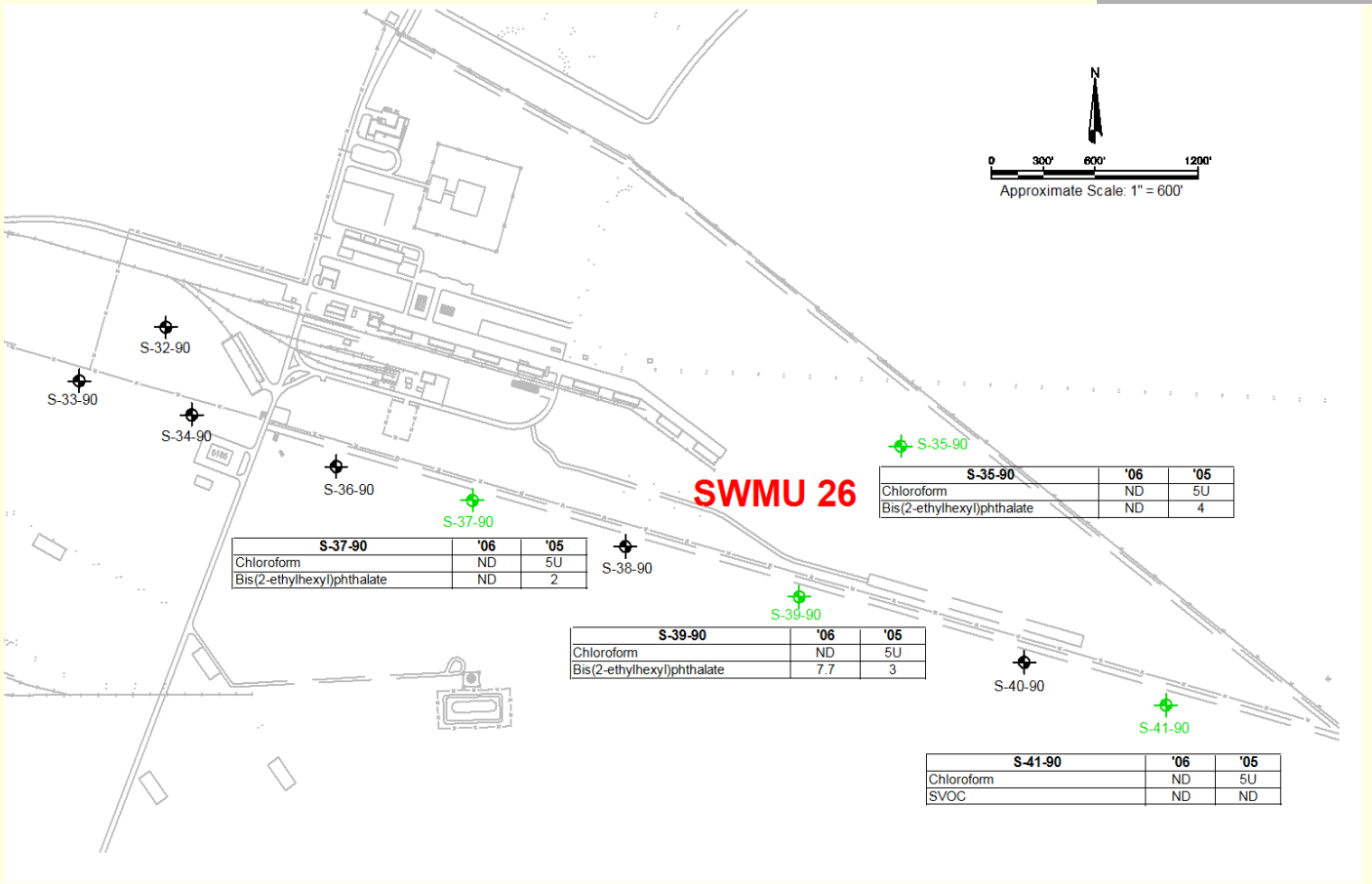
DCD SWMU 26 Sampling Results (µg/L)



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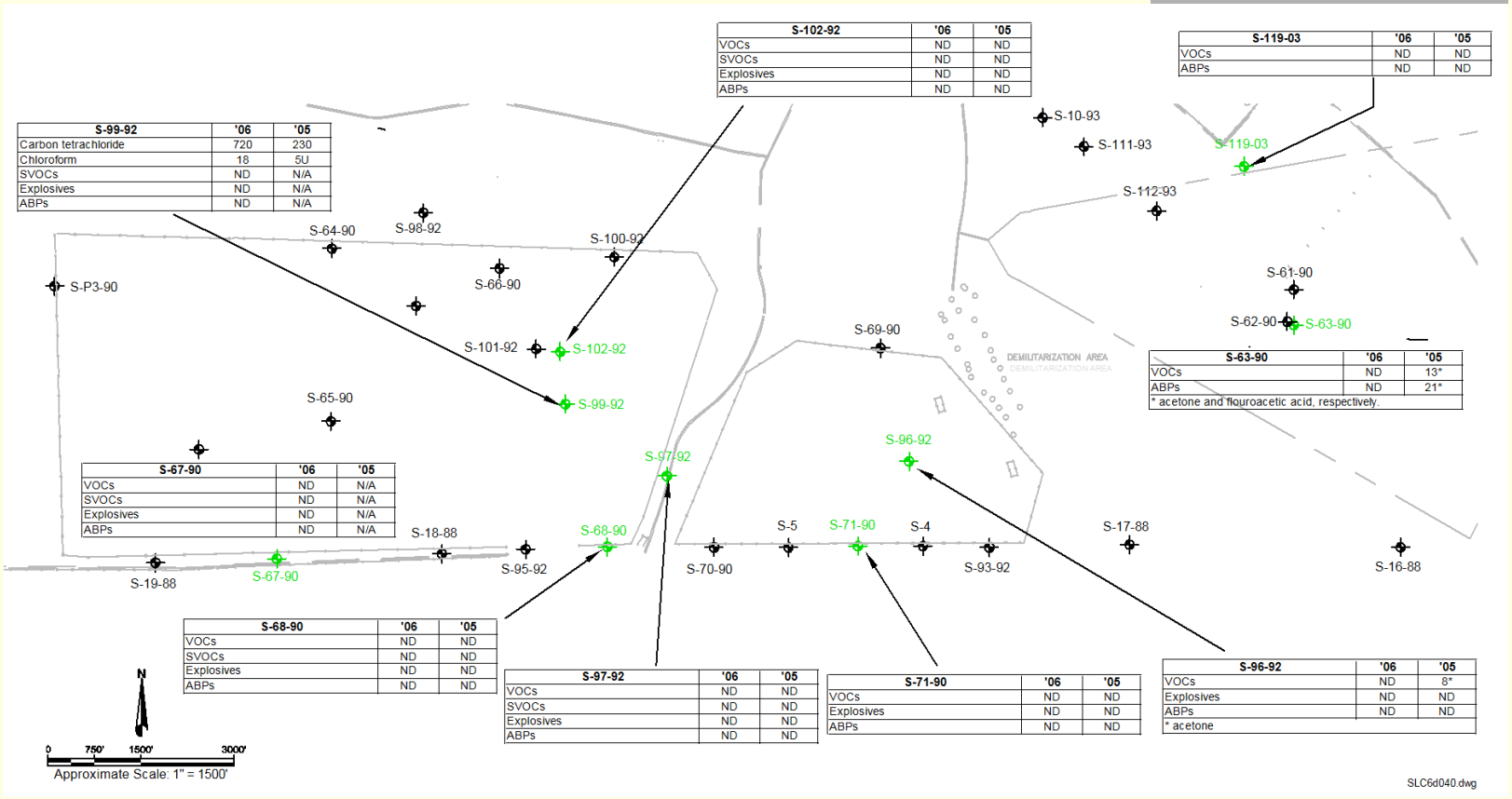
DCD Southern SWMU Sampling Results (µg/L)



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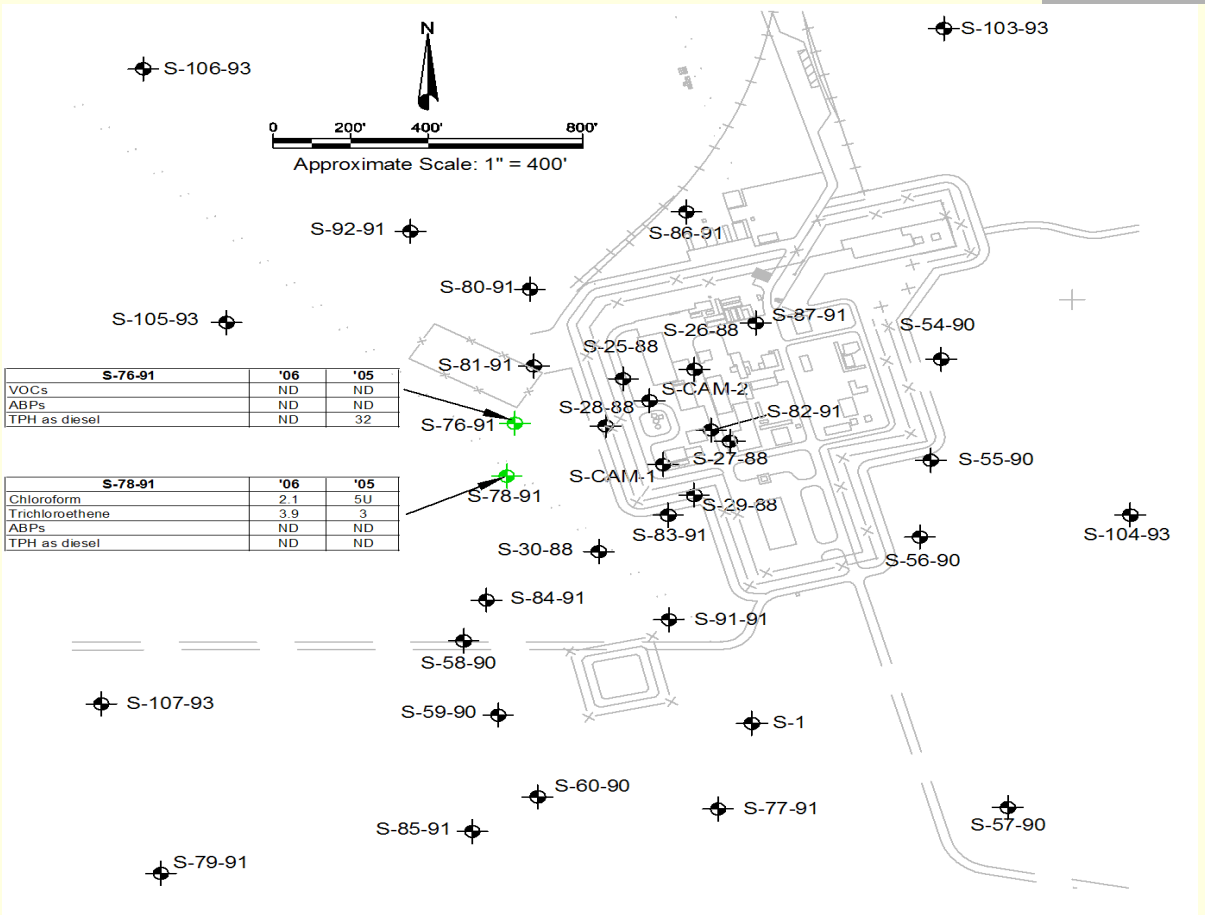
DCD SWMU 13/30 Sampling Results (µg/L)



S-76-91	'06	'05
VOCs	ND	ND
ABPs	ND	ND
TPH as diesel	ND	32

S-78-91	'06	'05
Chloroform	2.1	5U
Trichloroethene	3.9	3
ABPs	ND	ND
TPH as diesel	ND	ND

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Summary of Results:

- No significant changes in groundwater elevations or flow direction from previous events.
- Bis(2-ethylhexyl)phthalate detected at SWMU 26
- Chloroform and carbon tetrachloride detected at SWMU 25 at concentrations double those of the previous year
- Chloroform and trichloroethene detected at SWMU 13/30
- Light film of LNAPL detected at well number S-78-91, too thin to measure. LNAPL was not detected at well number S-76-91

2006 Monitoring Well Sampling and Analysis Event

This concludes our presentation.

Thank you for your attention and participation.

Are there any questions?